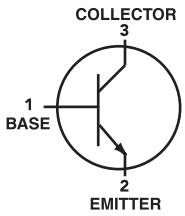
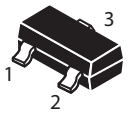
WEITRON

2SC5344

NPN General Purpose Transistors

Lead(Pb)-Free





SOT-23

MAXIMUM RATINGS(Ta=25°C)

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	V_{CEO}	30	V
Collector-Base Voltage	V_{CBO}	35	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	800	mA
Total Device Dissipation T_A=25°C	P_D	200	mW
Junction Temperature	T_j	+150	°C
Storage Temperature	T_{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

Characteristics	Symbol	Min	Typ	Max	Unit
Collector-Emitter Breakdown Voltage I_C = 0.1mA, I_B = 0	$V_{(BR)CEO}$	30	-	-	V
Collector-Base Breakdown Voltage I_C = 10mA, I_E = 0	$V_{(BR)CBO}$	35	-	-	V
Emitter-Base Breakdown Voltage I_E= 0.01mA, I_C =0	$V_{(BR)EBO}$	5.0	-	-	V
Collector Cutoff Current V_{CB} = 35V, I_E = 0	I_{CBO}	-	-	0.1	μA
Emitter Cutoff Current V_{EB} = 5V, I_C = 0	I_{EBO}	-	-	0.1	μA

ON CHARACTERISTICS

Collector-Emitter Saturation Voltage I_C = 500mA, I_B = 50mA	$V_{CE(sat)}$	-	-	0.5	V
DC Current Transfer Ration V_{CE} = 1V, I_C = 100mA	h_{FE}	100	-	320	

SMALL-SIGNAL CHARACTERISTICS

Transition Frequence V_{CE} = 5V, I_C =10mA, f = 100MHz	f_T	-	120	-	MHz
Collector Output Capacitance V_{CB} =10V, I_E = 0, f = 1MHz	C_{ob}	-	13	-	pF

Classification of h_{FE}

Rank	O	Y
Range	100-200	160-320
Marking	FAO	FAY

Typica Characteristics

Fig. 1 P_C - T_a

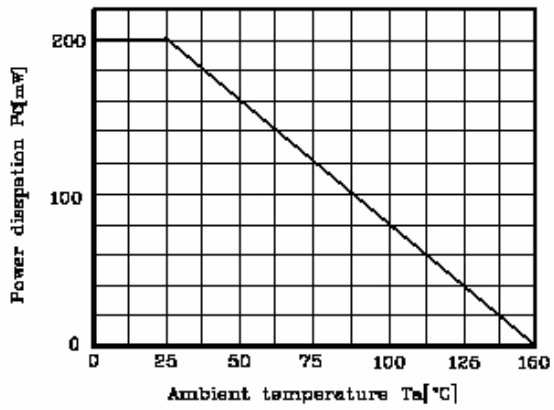


Fig. 2 I_C - V_{BE}

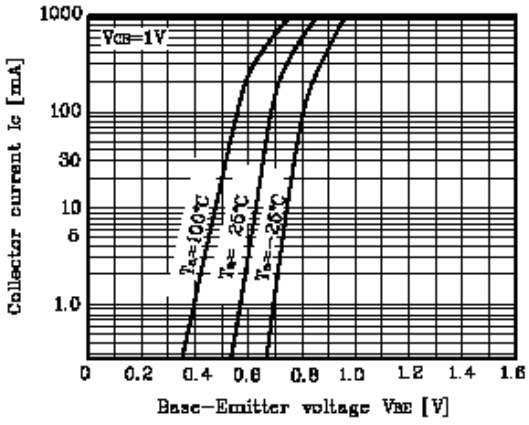


Fig. 3 I_C - V_{CE}

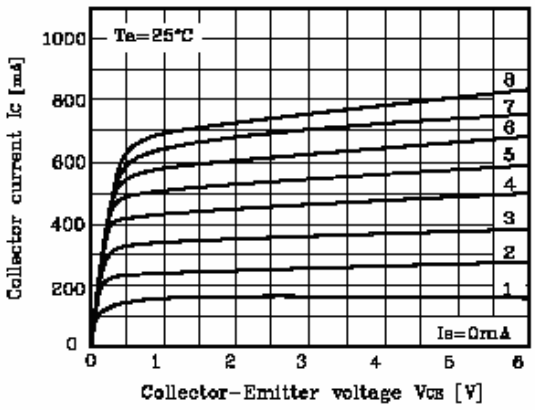


Fig. 4 $V_{CE(sat)}$ - I_C

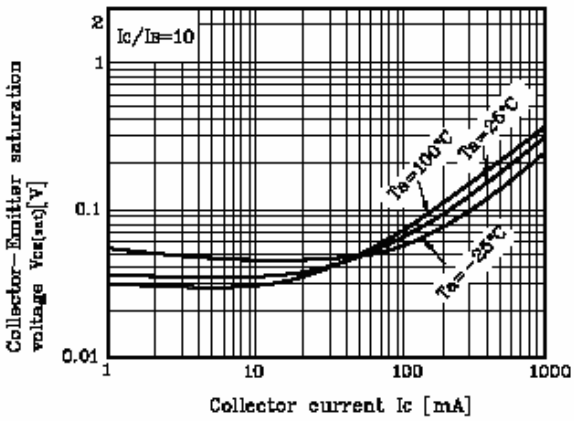
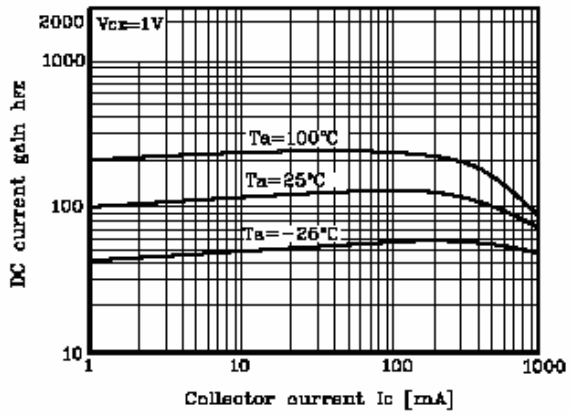
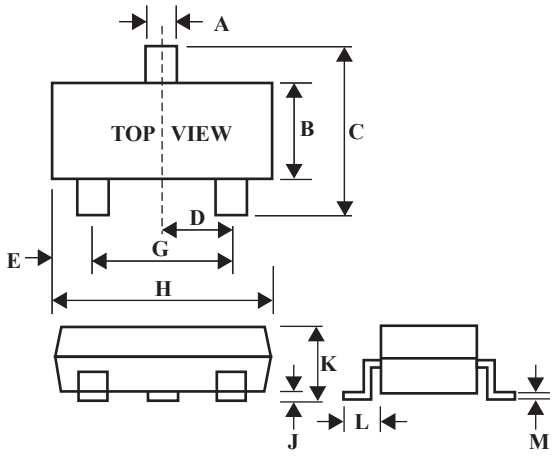


Fig. 5 h_{FE} - I_C



SOT-23 Outline Dimension



SOT-23		
Dim	**Min**	**Max**
A	0.35	0.51
B	1.19	1.40
C	2.10	3.00
D	0.85	1.05
E	0.46	1.00
G	1.70	2.10
H	2.70	3.10
J	0.01	0.13
K	0.89	1.10
L	0.30	0.61
M	0.076	0.25